PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY

To:
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ENTERED
Nixon Peabody LLP
AUG 0 8 2002
FILE 200701/1093
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PCT

NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL SEARCH REPORT OR THE DECLARATION

(PCT Rule 44.1)

	Date of Mailing (*day/month/year*) 31 JUL 2002
Applicant's or agent's file reference 200701/1093	**FOR FURTHER ACTION** See paragraphs 1 and 4 below
International application No. PCT/US01/50857	International filing date (*day/month/year*) 25 October 2001 (25.10.2001)
Applicant ADVION BIOSCIENCES, INC.	

1. ☐ The applicant is hereby notified that the international search report has been established and is transmitted herewith.

Filing of amendments and statement under Article 19:
The applicant is entitled, if he so wishes, to amend the claims of the international application (see Rule 46):

When? The time limit for filing such amendments is normally two months from the date of transmittal of the international search report.

Where? Directly to the International Bureau of WIPO, 34, chemin des Colombettes 1211 Geneva 20, Switzerland, Facsimile No.: (41-22) 740.14.35

For more detailed instructions, see the notes on the accompanying sheet.

2. ☐ The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect is transmitted herewith.

3. ☐ **With regard to the protest** against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:

☐ the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.

☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

4. **Reminders**

Shortly after **18 months** from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in Rules 90 *bis*.1 and 90 *bis*.3, respectively, before the completion of the technical preparations for international publication.

Within **19 months** from the priority date, but only in respect of some designated Offices, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase **until 30 months** from the priority date (in some Offices even later); otherwise the applicant must, **within 20 months** from the priority date, perform the prescribed acts for entry into the national phase before those designated Offices.

In respect of other designated Offices, the time limit of **30 months** (or later) will apply even if no demand is filed within 19 months.

See the Annex to Form PCT/IB/301 and, for details about the applicable time limits, Office by Office, see the *PCT Applicant's Guide*, Volume II, National Chapters and the WIPO Internet site.

Name and mailing address of the ISA/US Commissioner for Patents Box PCT Washington, D.C. 20231 Facsimile No. (703)305-3230	Authorized officer Kathleen Kerr Telephone No. (703) 308-0196

Form PCT/ISA/220 (April 2002)

(See notes on accompanying sheet)

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 200701/1093	**FOR FURTHER ACTION**	see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.
International application No. PCT/US01/50857	International filing date (*day/month/year*) 25 October 2001 (25.10.2001)	(Earliest) Priority Date (*day/month/year*) 27 October 2000 (27.10.2000)
Applicant ADVION BIOSCIENCES, INC.		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 4 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. **Basis of the Report**
 a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 ☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).
 b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing:
 ☐ contained in the international application in written form.
 ☐ filed together with the international application in computer readable form.
 ☐ furnished subsequently to this Authority in written form.
 ☐ furnished subsequently to this Authority in computer readable form.
 ☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
 ☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.
2. ☐ **Certain claims were found unsearchable** (See Box I).
3. ☐ **Unity of invention is lacking** (See Box II).
4. With regard to the **title**,
 ☒ the text is approved as submitted by the applicant.
 ☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,
 ☒ the text is approved as submitted by the applicant.
 ☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No. 1
 ☐ as suggested by the applicant. ☐ None of the figures
 ☒ because the applicant failed to suggest a figure.
 ☐ because this figure better characterizes the invention.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US01/50857

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : C12Q 1/68
US CL : 435/6

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : 435/6

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X,P --- Y,P	ZHANG et al. Electrospray Ionization Mass Spectrometry-Based Genotyping: An Approach for Identification of Single Nucleotide Polymorphisms. Anal. Chem. May, 2001, Vol 73, pages 2117-2125	23-25,27,30-42,66-68,70,73-84 --- 1-22,26,28,29,43-65,69,71,72,85-87
Y	HAFF et al. Single-Nucleotide Polymorphism Identification Assays Using a Thermostable DNA Polymerase and Delayed Extraction MALDI-TOF Mass Spectrometry. Genome Methods. April, 1997, Vol. 7, No. 4, pages 378-388.	1-3,5,6,9-22,44-46,48,49,52-62,65
Y,P	SUN et al. A new MALDI-TOF based mini-sequencing assay for genotyping of SNPS. Nucleic Acid Research, June, 2000, Vol. 28, No. 12, pages e68 i-viii, in particular page ii, left column.	1-3,5-7,9-21,44-46,48-50,52-62
A	LI et al. Single nucleotide polymorphism detemination using primer extension and time-of-flight mass spectrometry. Electrophoresis 1999, Vol. 20, pages 1258-1265.	1-87
A	GRIFFIN et al. Single-nucleotide polymorphism analysis by MALDI-TOF mass spectrometry. TIBTECH, February 2000, Vol. 18, pages 77-84.	1-87

☒ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
12 May 2002 (12.05.2002)	31 JUL 2002
Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703)305-3230	Authorized officer Kathleen Kerr Telephone No. (703) 308-0196

Form PCT/ISA/210 (second sheet) (July 1998)

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US01/50857

C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A,P	GUT, I.G. Automation in Genotyping of Single Nucleotide Polymorphisms. Human Mutation, June, 2001, Vol. 17, pages 475-492.	1-87

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US01/50857

Continuation of B. FIELDS SEARCHED Item 3:
CAPLUS
search terms: single nucleotide polymorphism, primer extension, mass, exonuclease